USF REFORM:

THE CONNECT AMERICA FUND

and

THE MOBILITY FUND

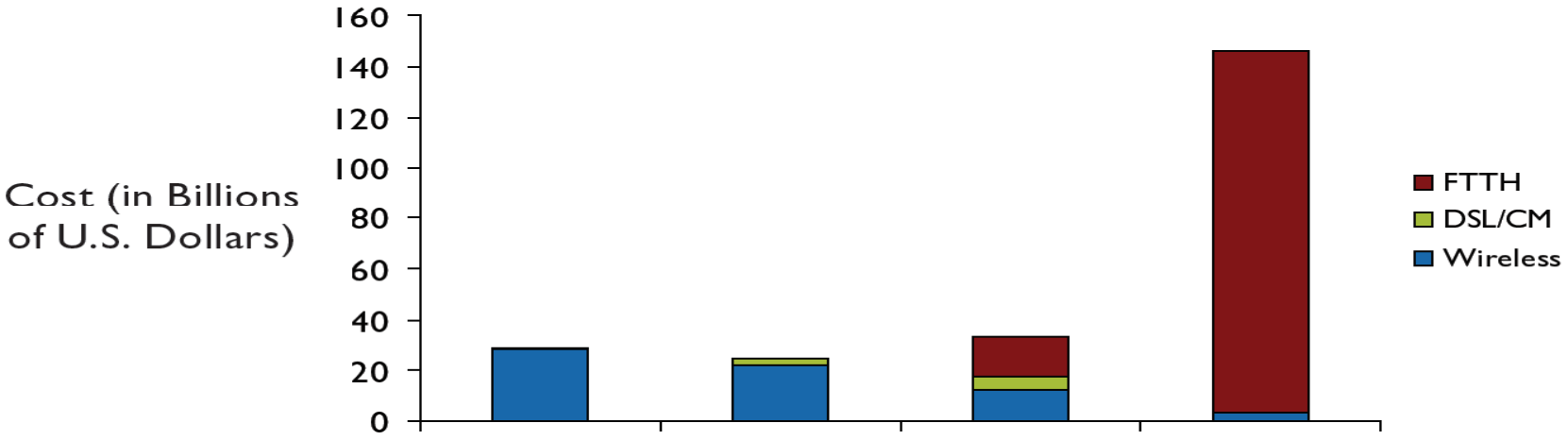
Guiding Universal Service Principles for the Coming Decade

- **Focus on universal access to broadband**
- **Efficiency is vital to serving everyone**
- **Flexibility to respond to evolving telecommunications market**

The Case for Universal Broadband

- Voice is no longer a stand-alone service
  - Voice is an application on data-driven telecommunications networks
- Broadband is today's telephone service
  - Like telephone service in the 20th Century, Broadband is necessity for the economic, social and political development of communities in the 21st Century
- Broadband is the most critical infrastructure required for economic development
  - Virtually no business can operate without broadband access to suppliers, customers, potential employees, and business-critical information

Fiscal Responsibility: Efficient Deployment of Broadband Technology



Scenario	Positives	Negatives	Wireline/Wireless Mix
Discount	Cheapest option	Potential to run out of capacity	90 percent wireless/ 10 percent DSL-cable modem
Duct Tape	Uses existing infra-structure to the fullest	Limited bandwidth for future	70 percent wireless/ 30 percent DSL-cable modem
Pragmatic	Bandwidth for the most users at cost-effective pricing	Leaves some users with-out needed bandwidth	40 percent wireless/ 50 percent DSL-cable modem/ 10 percent FTTH
Gold-Plated	Virtually unlimited bandwidth	Most expensive option and slowest to develop	90 percent FTTH/ 10 percent wireless

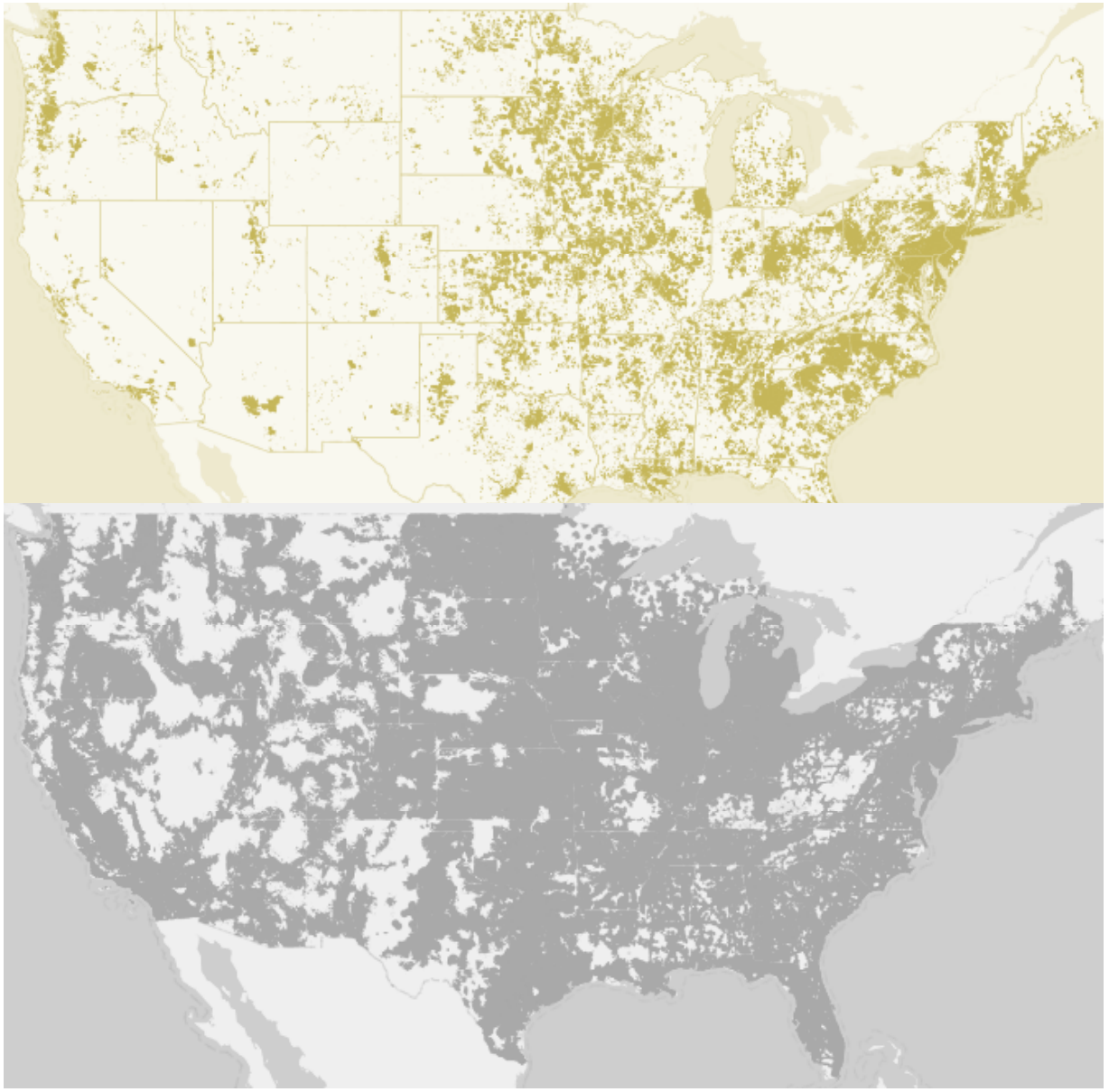
Source: The Yankee Group

Starting point: Existing broadband-capable networks

Wireline: focused on population centers, little plant beyond

Wireless: approaching ubiquity, upgradeable to broadband with less capital investment

The National Broadband Map



Efficient and Effective Broadband: The "Donut"

- The "Hole" – Population centers with demand for higher bandwidth networks for hospitals, schools and other critical community facilities
  - Economic to build fiber-optic, DSL, coaxial broadband networks
- The "Bread" – Less populated areas outside the city limits with unmet demand for residential grade broadband
  - Cellular technology by far the most economic ($300 per household vs. $5000 per household for wireline technologies)
- The "Sprinkles"
  - Satellite where necessary due to terrain issues

Flexibility

- The Telecommunications Market Changes Rapidly
  - Competition is driving innovation
  - Innovation is driving down costs
  - Lower costs enables more deployment
- Fewer Decisions, Fewer Mistakes
  - Picking winners and losers, even based on objective criteria is dangerous
  - Portability of support leaves investment decisions and investment risk in private sector, where it belongs

Markets Forces at Work

1995-2008:

Migration of traffic from wireline to wireless

2005-2010

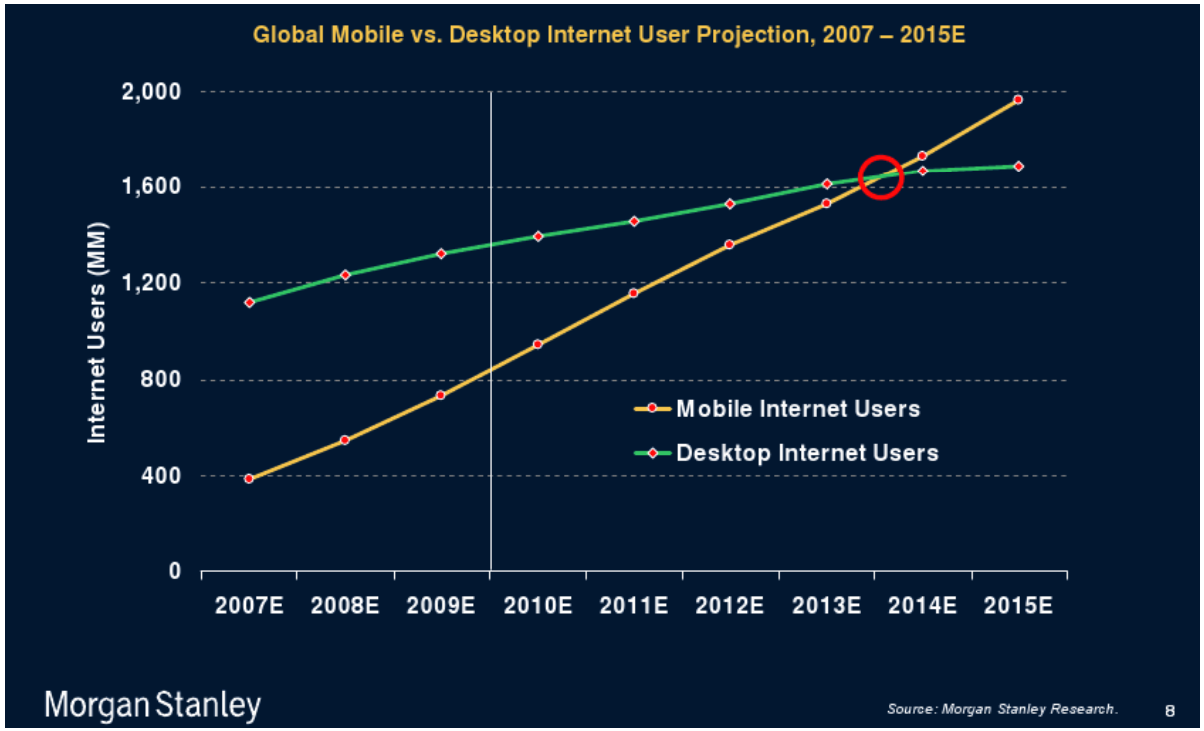
Migration of traffic from voice to data

2010-2015

Migration of broadband use from wireline to wireless

Next?

- Internet access will be primarily mobile by 2014



The CAF and Mobility Fund NPRMs

- Nebraska Stands to Lose Millions
  - Phase-out of CETC support
  - Reverse auctions for mobile broadband, but areas and funds limited; most of Nebraska won't qualify
- Reverse Auctions – Problems
  - Creating a series of fair auctions will be difficult
    - Ideally suited to establishing least cost provider of simple goods with clear specifications
    - Broadband is a service, raising complex coverage, availability and customer service issues
  - Potential for anti-competitive bidding process
    - Under-bid, underperform
    - Force competitors from adjacent, profitable markets
    - Government-guaranteed bidders (rate of return)
    - Irrational bidding – no risk capital or existing business

Solutions

- If Reverse Auctions Are To Be Used, Key Changes:
  - Establish “floor”, at which all competitors are eligible to receive support only if they win the customer
  - Use support “zones” similar to old U S West zone charge concept and Kansas USF program
  - Support should be re-auctioned or revisited frequently
- All Areas Needing Broadband Should Be Eligible
  - If 4 Mbps downstream is the appropriate requirement, all areas currently lacking 4 Mbps should be eligible for support
  - As currently proposed, existing 768k mobile data networks would render most of Nebraska ineligible for CAF and Mobility Fund dollars